

## 10-100W Low Profile DIN Rail Mount Power Supplies

### Features

- ◆ Low Profile for Building Automation
- ◆ Class II Double Insulation
- ◆ High Efficiency (Up to 90%)
- ◆ ErP Compliant Design
- ◆ Low No Load Power Consumption
- ◆ Class 2 Models to UL1310
- ◆ SEMI F47 Compliant



### Key Market Segments & Applications



### Specifications

| Model                                       |     | DRL10                                                                                           | DRL30          | DRL60          | DRL100         |
|---------------------------------------------|-----|-------------------------------------------------------------------------------------------------|----------------|----------------|----------------|
| Input Voltage range                         | V   | 85 - 264VAC, 120 - 373VDC* (Withstands 300VAC for 5 seconds)                                    |                |                |                |
| Input Frequency                             | Hz  | 47 - 63Hz                                                                                       |                |                |                |
| Inrush Current at 230VAC (typ) (Cold Start) | A   | 40A                                                                                             | 50A            | 60A            | 60A            |
| Power Factor (115/230VAC)                   |     | Meets IEC61000-3-2 Class A                                                                      |                |                |                |
| Input Current (110/230VAC)                  | A   | 0.56 / 0.42                                                                                     | 0.58 / 0.45    | 0.5 / 0.43     | 0.5 / 0.47     |
| Line & Load Regulation                      | -   | 0.18 / 0.12                                                                                     | 0.6 / 0.4      | 1.2 / 0.8      | 2.0 / 1.1      |
| Ripple & Noise                              | -   | See model selector                                                                              |                |                |                |
| Overcurrent Protection                      | -   | 12 to 15V: 120mV, 24V: 240mV                                                                    |                |                |                |
| Overvoltage Protection                      | -   | >105% Hiccup with auto recovery                                                                 |                |                |                |
| Hold Up Time (typ) at 115VAC Input          | ms  | See model selector. Cycle AC input voltage to reset                                             |                |                |                |
| Efficiency                                  | -   | 20ms                                                                                            | 20ms           | 20ms           | 15ms           |
| No Load Power Draw                          | W   | See model selector                                                                              |                |                |                |
| LED Indicator                               | -   | <0.3W                                                                                           | <0.3W          | <0.5W          | <0.5W          |
| Operating Temperature (-25°C start-up)      | °C  | Green LED indicates DC is OK                                                                    |                |                |                |
| Storage Temperature                         | -   | DRL10, 30, 60: -20 to +71°C, derate linearly to 60% load from 55 to 71°C                        |                |                |                |
| Operating Humidity (non condensing)         | %RH | DRL100: -20 to +71°C, derate linearly to 60% load from 51 to 71°C                               |                |                |                |
| Parallel Operation                          | -   | DRL100 (<115VAC): -20 to +71°C, derate linearly to 40% load from 40 to 71°C                     |                |                |                |
| Series operation                            | -   | -40 to +85°C                                                                                    |                |                |                |
| Cooling                                     | -   | 5 - 95%RH                                                                                       |                |                |                |
| Withstand Voltage (For 1 minute)            | VAC | Not available                                                                                   |                |                |                |
| Isolation Resistance                        | MΩ  | Possible                                                                                        |                |                |                |
| Vibration (Operating)                       | -   | Convection                                                                                      |                |                |                |
| Shock                                       | -   | Input to Output 3kVAC                                                                           |                |                |                |
| Safety Agency Certifications                | -   | >100MΩ at 25°C, 70%RH & 500VDC                                                                  |                |                |                |
| Conducted & Radiated EMI                    | -   | IEC 60068-2-6, Sine Wave, 10-500Hz, 19.6m/s <sup>2</sup> (2G peak)                              |                |                |                |
| Immunity                                    | -   | 10 min per cycle, 60 min for all X,Y,Z directions                                               |                |                |                |
| Line Dips                                   | -   | IEC 60068-2-27, Half Sine Wave, 39.2m/s <sup>2</sup> (4G) for a duration of 22ms                |                |                |                |
| Weight (Typ)                                | g   | 3 shocks for each 3 directions, 9 times in total                                                |                |                |                |
| Size (WxHxD)                                | in  | UL508 Listed, UL/CSA/EN60950-1†, UL1310 Class 2 (1), CE Mark                                    |                |                |                |
| Mounts on TS-35/7.5 or -35/15 rail          | mm  | EN55032-B Conducted, EN55032-A Radiated                                                         |                |                |                |
| Case material                               | -   | EN61000-4-2 (lvl 3) , -3 (lvl 3), -4 (lvl 4), -5 (lvl 3), -6 (lvl 3), -8 (lvl 4), -11 (class 3) |                |                |                |
| Warranty                                    | hrs | SEMI-F47 (200VAC input)                                                                         |                |                |                |
|                                             |     | 65                                                                                              | 120            | 200            | 280            |
|                                             |     | 0.71x3.58x2.19                                                                                  | 1.42x3.58x2.19 | 2.13x3.58x2.19 | 2.83x3.58x2.19 |
|                                             |     | 18x91x55.6                                                                                      | 36x91x55.6     | 54x91x55.6     | 72x91x55.6     |
|                                             |     | Flame Retardant Polycarbonate (UL94 V-0)                                                        |                |                |                |
|                                             |     | Three years                                                                                     |                |                |                |

(1) NEC Class 2 in accordance with UL1310. Excludes DRL100-24-1 model

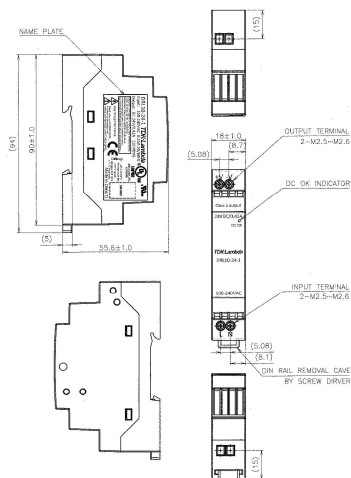
† Certification to the IEC62368-1 standard in progress (2018)

\* Safety certified for AC input only

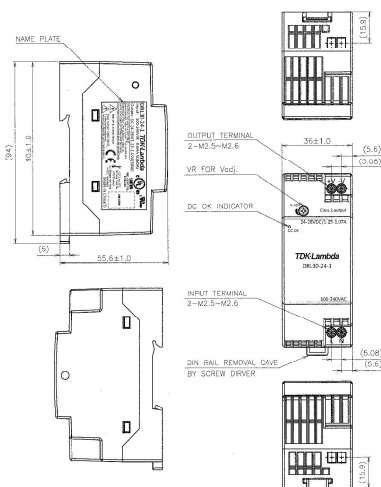
## Output Ratings

| Model          | Output Voltage (V) | Adjust Range (V) | Max Current (A) | Max Power (W) | Load Reg (mV) | Line Reg (mV) | Overvoltage V | Efficiency (%) (115/230VAC) | UL1310 Class 2 |
|----------------|--------------------|------------------|-----------------|---------------|---------------|---------------|---------------|-----------------------------|----------------|
| DRL10-12-1     | 12V                | -                | 0.84A           | 10.08W        | 120mV         | 120mV         | 13.8 - 16.2V  | 85 / 85                     | Yes            |
| DRL30-12-1     | 12V                | 12 - 15V         | 2.1A            | 25.2W         | 120mV         | 120mV         | 16 - 19V      | 87 / 88                     | Yes            |
| DRL60-12-1     | 12V                | 12 - 15V         | 4.5A            | 54W           | 120mV         | 120mV         | 16 - 19V      | 87 / 87                     | Yes            |
| DRL30-15-1     | 15V                | 12 - 15V         | 1.68A           | 25.2W         | 120mV         | 120mV         | 16 - 19V      | 87 / 88                     | Yes            |
| DRL60-15-1     | 15V                | 12 - 15V         | 3.6A            | 54W           | 120mV         | 120mV         | 16 - 19V      | 87 / 87                     | Yes            |
| DRL10-24-1     | 24V                | -                | 0.42A           | 10W           | 240mV         | 240mV         | 29 - 35V      | 87 / 87                     | Yes            |
| DRL30-24-1     | 24V                | 24 - 28V         | 1.25A           | 30W           | 240mV         | 240mV         | 29 - 35V      | 88 / 90                     | Yes            |
| DRL60-24-1     | 24V                | 24 - 28V         | 2.5A            | 60W           | 240mV         | 240mV         | 29 - 35V      | 89 / 90                     | Yes            |
| DRL100-24-1    | 24V                | 24 - 28V         | 4.2A            | 100.8W        | 240mV         | 240mV         | 29 - 35V      | 88 / 90                     | -              |
| DRL100-24-1/C2 | 24V                | -                | 3.67A           | 88W           | 240mV         | 240mV         | 26 - 30V      | 88 / 90                     | Yes            |

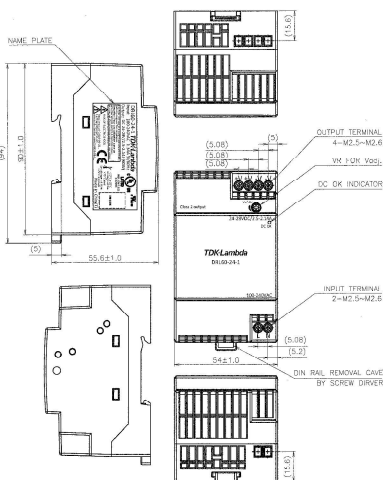
## DRL10 Outline Drawing



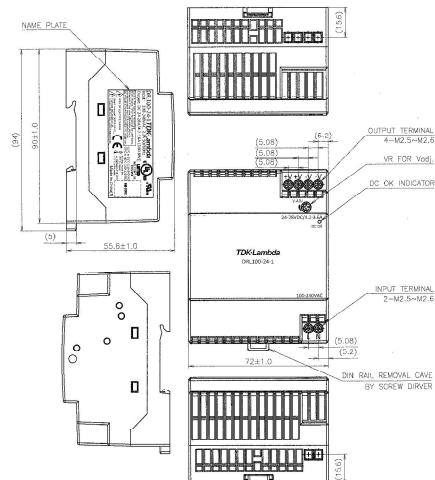
## DRL30 Outline Drawing



## DRL60 Outline Drawing



## DRL100 Outline Drawing



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